

Claims

- [c1] I claim:
- 1.A device consisting of a hollow outer half-cylinder, and a solid inner half-cylinder that can rotate around a common center for both the inner and outer half-cylinders, with individual slices that can be attached to the inner half cylinder making a complete 360-degrees cylinder.
 - [c2] 2.A hollow outer half-cylinder according to claim 1, which has marked off units around the 180 degrees of the half-cylinder.
 - [c3] 3.A hollow outer half-cylinder according to claim 1, which has the equations for the circle's circumference and area, the arc length and sector area on the top half circle, the outer surface area of the cylinder and identifies the radius.
 - [c4] 4.An inner half-cylinder according to claim 1, which has marked off units around the 180 degrees of the half-cylinder.
 - [c5] 5.An inner half-cylinder according to claim 1, which has the equations for the volume of the cylinder and of a slice, the front surface area of the slice, and the side

surface area of the slice and identifies the radius and height.

- [c6] 6. Individual slice according to claim 1, which shows the equations for the volume of a slice, the front surface area of the slice, the side surface area of the slice and identifies the angle (θ) of the slice, the radius (r) and the height of the slice (L).
- [c7] 7. Individual slices according to claim 1, which have different angles and numerical values for the radius and height of the slice, the actual values of the arc length, the sector area, the volume of a slice, the front surface area of the slice, and the side surface area of the slice.
- [c8] 8. A device according to claim 1, which can be used to teach the geometry of a cylinder and the equations involved.